

WHAT IS CLAIMED IS:

1. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising:

providing a deployment catheter having an elongate flexible body with a proximal end and a distal end, and an implantable device removably carried by the distal end;

positioning at least a portion of the device in the left atrial appendage; and
enlarging the device within the left atrial appendage.

2. The method of Claim 1, wherein the device self-expands to its enlarged shape.

3. The method of Claim 1, wherein the device includes an expandable frame.

4. The method of Claim 3, wherein the device includes a mesh barrier operably connected to the expandable frame.

5. The method of Claim 1, further comprising releasing the device from the deployment catheter after the device is enlarged within the left atrial appendage.

6. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising:

providing an implantable device having a proximal end and a distal end, the implantable device having a collapsed configuration and an expanded configuration;

positioning the implantable device in the left atrial appendage while the device is in its collapsed configuration; and

enlarging the implantable device in the left atrial appendage.

7. The method of Claim 6, wherein the implantable device is at least partially self-expanding, and is restrained from expansion until positioned in the left atrial appendage.

8. The method of Claim 7, wherein enlarging the implantable device in the left atrial appendage comprises releasing the implantable device from a deployment catheter.

9. The method of Claim 8, wherein the implantable device is positioned in an inner lumen of the deployment catheter, and releasing the implantable device from the deployment catheter comprises axially moving the implantable device out of the inner lumen of the deployment catheter.

10. The method of Claim 8, wherein releasing the implantable device from the deployment catheter comprises detaching the implantable device from a distal end of the deployment catheter.

11. The method of Claim 6, wherein the implantable device comprises an expandable frame.

12. The method of Claim 11, further comprising a mesh operably connected to the expandable frame.

13. The method of Claim 6, wherein the implantable device comprises an inflatable balloon.

14. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising:

advancing a catheter having a proximal end and a distal end through the patient until the distal end is disposed adjacent the opening of the patient's left atrial appendage; and

releasing a device from the distal end of the catheter to deploy the device within the left atrial appendage, the device configured to prevent passage of embolic material from the left atrial appendage.

15. The method of Claim 14, wherein the device is positioned within an inner lumen of the catheter, and releasing the device comprises applying axial force in a distal direction to the device to deploy it.

16. The method of Claim 14, wherein releasing the device from the catheter comprises detaching the device from the distal end of catheter.

17. The method of Claim 14, wherein the device comprises an expandable frame.

18. The method of Claim 17, further comprising a mesh operably connected to the expandable frame.

19. The method of Claim 14, wherein the device comprises an inflatable balloon.

20. The method of Claim 14, wherein the device comprises a polymer mass.

21. The method of Claim 14, wherein the device comprises an occlusive coil.

22. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising positioning a device in the left atrial appendage, the device configured to prevent passage of emboli from the left atrial appendage.

23. The method of Claim 22, wherein the device comprises a mesh barrier.

24. The method of Claim 22, wherein the device comprises an expandable frame.

25. The method of Claim 22, wherein the device comprises an inflatable balloon.

26. The method of Claim 22, wherein the device comprises a polymer mass.

27. The method of Claim 22, wherein the device comprises an occlusive coil.

28. The method of Claim 22, wherein the device is delivered percutaneously through the patient.

29. The method of Claim 22, wherein the device engages walls of the left atrial appendage.

30. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising:

percutaneously delivering a device to the left atrial appendage; and

preventing passage of embolic material from the left atrial appendage with the device.

31. The method of Claim 30, wherein the device is delivered using a catheter.

32. The method of Claim 31, wherein the device comprises an expandable frame.

33. The method of Claim 32, wherein the device comprises a mesh operably connected to the expandable frame.

34. The method of Claim 30, wherein the device comprises an inflatable balloon.

35. The method of Claim 30, wherein the device comprises a polymer mass.

36. The method of Claim 30, wherein the device comprises an occlusive coil.

37. The method of Claim 30, wherein preventing passage of embolic material comprises attaching tissue attachment members to an opening of the left atrial appendage, and drawing the tissue attachment members closer together.

38. A method of preventing passage of embolic material from a left atrial appendage of a patient, comprising:

positioning a barrier adjacent an opening of the left atrial appendage; and

engaging at least one anchoring element with tissue within the left atrial appendage, the at least one anchoring element being operatively connected to the barrier to hold the barrier adjacent the opening and prevent passage of embolic material from the left atrial appendage.

- 39. The method of Claim 38, wherein the barrier is a mesh.
- 40. The method of Claim 38, wherein the barrier is porous.
- 41. The method of Claim 40, wherein the barrier has a pore size of up to about 0.04 inches.
- 42. The method of Claim 40, wherein the barrier is made of ePTFE.
- 43. The method of Claim 38, wherein the barrier has generally a disc shape.
- 44. The method of Claim 38, wherein the barrier comprises an inflatable balloon.
- 45. The method of Claim 38, wherein the barrier is connected to an expandable frame.
- 46. The method of Claim 38, wherein the at least one anchoring element extends at least partially transversely away from the barrier toward a distal end of the left atrial appendage.
- 47. The method of Claim 38, wherein the at least one anchoring element engages tissue at the distal end of the LAA.
- 48. The method of Claim 38, wherein a plurality of anchoring elements engage tissue along the side walls of the LAA.
- 49. The method of Claim 38, further comprising delivering the barrier to the left atrial appendage with a catheter.